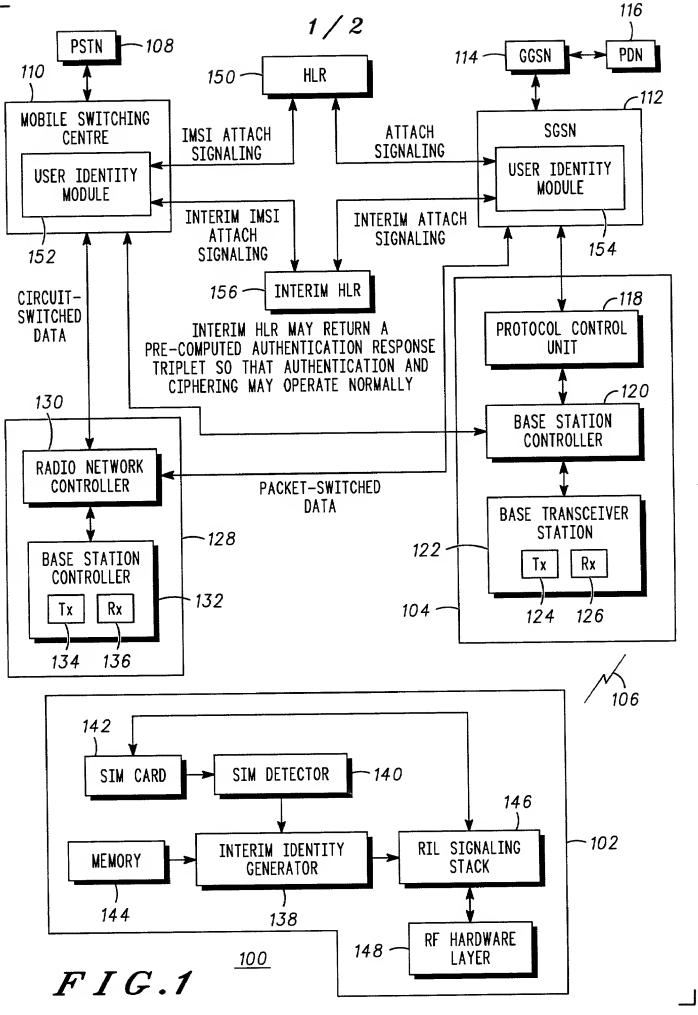
PSTN
108
110
MOBILE SWITCHING CENTRE
USER IDENTITY MODULE
152
150
HLR
IMSI ATTACH SIGNALING
ATTACH SIGNALING
INTERIM IMSI ATTACH SIGNALING
INTERIM ATTACH SIGNALING
156
INTERIM HLR
INTERIM HLR MAY RETURN A PRE-COMPUTED AUTHENTICATION RESPONSE TRIPLET SO THAT AUTHENTICATION AND CIPHERING MAY OPERATE NORMALLY
CIRCUIT-SWITCHED DATA
116
114
GGSN
PDN
112
SGSN
USER IDENTITY MODULE
154
118
PROTOCOL CONTROL UNIT
120
BASE STATION CONTROLLER
130
RADIO NETWORK CONTROLLER
PACKET-SWITCHED DATA
128
BASE STATION CONTROLLER
Tx
Rx
132
134
136
122
BASE TRANSCEIVER STATION
Tx
Rx
124
126
104
106
142
SIM CARD
SIM DETECTOR
140
146
MEMORY
INTERIM IDENTITY GENERATOR
RIL SIGNALING STACK
102
144
138
148
RF HARDWARE LAYER
100

FIG.1

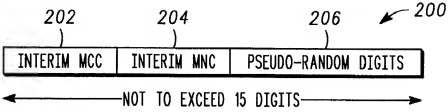

FIG. 2

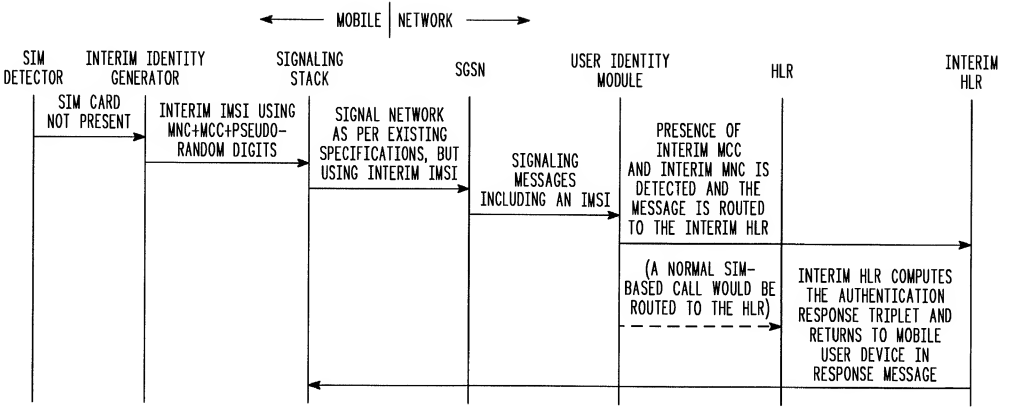

FIG. 3

PECEN
CS9803901